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Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PHOTODYNAMIC THERAPY COMPOUNDS

(57) Abstract: Compounds for photodynamic therapy comprising tetra (hydroxyaryl) porphyrins, chlorins and bacteriochlorins conjugated with antibodies reactive to antigens of cancerous or other diseased cells.



WO 01/74398 A1

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 00/01215

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K47/48 C07D487/22 A61K41/00 A61P35/00
 //(C07D487/22, 257:00, 209:00, 209:00, 209:00, 209:00)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

CHEM ABS Data, WPI Data, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	VROUENRAETS, MAARTEN B. ET AL: "Development of meta-tetrahydroxyphenylchlorin-monoclonal antibody conjugates for photoimmunotherapy" CANCER RES. (1999), 59(7), 1505-1513 , XP002155118 the whole article	1-5, 7, 8, 11, 12
X	LATOUCHE, CELINE ET AL: "Synthesis of porphyrins with pendant arms: participation of the ancillary ligands to the complexation process in proteic medium" TETRAHEDRON LETT. (1995), 36(10), 1665-6 , XP004028558 compounds 1-4	3

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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

11 December 2000

Date of mailing of the international search report

27/12/2000

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 00/01215

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ALMOG, JOSEPH ET AL: "Synthesis of "capped porphyrins" TETRAHEDRON (1981), 37(21), 3589-601 , XP002155119 compound 34	3
X	----- JIANG, TAO ET AL: "Synthesis and Molecular Recognition Properties of a.beta.-Cyclodextrin Tetramer" J. ORG. CHEM. (1995), 60(22), 7293-7 , XP002155120 compound 12	3
X	----- DATABASE CHEMABS 'Online! CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; SYRBU, S. A. ET AL: "Synthesis of tetraphenylporphins with active groups in phenyl rings. 5. Tetrakis''(carboxymethylen)oxy!phenyl!porp hins and their ethyl esters" retrieved from STN Database accession no. 113:23474 XP002155121 RNs = 127812-08-2; 127812-09-3 & KHIM. GETEROTSIKL. SOEDIN. (1989), (10), 1373-7 ,	3
X	----- DATABASE CHEMABS 'Online! CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; SHETTY, S. J. ET AL: "A new 99mTc labeled porphyrin for specific imaging of Sarcoma 120: synthesis and biological study in a Swiss mouse model" retrieved from STN Database accession no. 124:336822 XP002155122 RN = 176840-94-1 & J. LABELLED COMPD. RADIOPHARM. (1996), 38(5), 411-418 , ----- -/--	3

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 00/01215

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE CHEMABS 'Online! CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; LINDSEY, JONATHAN S. ET AL: "252Cf plasma desorption mass spectrometry in the synthesis of porphyrin model systems" retrieved from STN Database accession no. 118:101693 XP002155123 RN = 64395-04-6 & ANAL. CHEM. (1992), 64(22), 2804-14 , -----</p>	3

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INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference FP-08-1078	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/GB 00/ 01215	International filing date (day/month/year) 30/03/2000	(Earliest) Priority Date (day/month/year)
Applicant VROUENRAETS, Maarten, B.; et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.



as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.



None of the figures.